

# Installing and Using `tinytex`

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## 1 Background

We will use RStudio to create `.qmd` files that contain our writing and our analysis in one file. We will compile (or “knit”) these `.qmd` files into `.pdf` files so that we can print them and upload them in an easy-to-read, portable format. The R package `{tinytex}` will help us configure some code that sits in the background and performs this compilation from `.qmd` to `.pdf`. After this initial installation, we will not need to invoke `tinytex` directly.

## 2 Procedure

Here are the steps for compiling directly to PDF. Open R and run

1. `install.packages("rmarkdown")`
2. `install.packages("tinytex")`
3. `library(rmarkdown)`
4. `tinytex::install_tinytex()`  
This step will take a couple minutes. Pay attention to any warnings/notices that arise, including those at the R prompt.

Now, restart RStudio (not just R, but the full RStudio).

Suppose you have a file called `my_ps_solutions.qmd` that you want to compile. To compile it, use the “Render” button.

To view your file, open the created `my_ps_solutions.pdf` in whatever you use to view PDFs (Preview, Acrobat, Skim, etc.)

To compile your file, you actually have several options:

- Use the “Render” button
- At the R prompt, run  
`rmarkdown::render("my_ps_solutions.qmd", "pdf_document")`
- At the R prompt, run  
`rmarkdown::render("my_ps_solutions.qmd")`  
if your `.qmd` file says `format: pdf` in the header

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